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HARRINGTON & SMITH, PC			FRINK, JOHN MOORE	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/726,724	HANSON ET AL.
	Examiner	Art Unit
	John M. Frink	2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-46 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 03 December 2003 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>12/03/2003</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

Drawings

1. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because Figs. 2 – 5 are currently illegible due to the contrast between the black background in the figure and the black text. Applicant is advised to employ the services of a competent patent draftsperson outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:
- The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
2. Claims 9, 10, 28, 29 and 45 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Specifically, the above claims reference agents evolving ‘towards a uniform random graph’, which is not known in the art. A search of the US-PGPUB, US Patent, EPO, DERWENT and IBM_TDB databases for the term ‘uniform random graph’ retrieved only 1 match, Applicant’s present pending application (said search provided below). Furthermore, ‘uniform random graph’ appears only in the claims, and is not given any further description in the specification.

Art Unit: 2142

a. BRS L20 1 uniform\$3 adj random adj graph US-PGPUB;

USPAT; EPO; DERWENT; IBM_TDB 2007/08/13 15:38

b. BRS L18 1 "uniform random graph" US-PGPUB; USPAT;

EPO; DERWENT; IBM_TDB 2007/08/13 15:38

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claims 1, 5, 7, 15, 21, 23, 24, 26, 40, 42 and 43 rejected under 35 U.S.C. 102(a) as being anticipated by Kennedy et al. (US 2004/0218582 A1), hereafter Kennedy.

4. Regarding claim 1, Kennedy shows in a data processing system, a method to automatically tune a topology of relationships between a plurality of self-organizing agents, comprising: obtaining information that is descriptive of the topology (Fig. 3, [0039-0040,0042,0051]); and based at least in part on the obtained information and on at least one criterion, making at least one recommendation to at least one of the plurality of agents that is intended to modify the topology ([0033-0038,0045-0047]).

5. Regarding claim 23, Kennedy shows a topology tuner software agent operable in a data processing system that comprises a plurality of self-organizing software agents (Abstract, Figs. 1 and 3, [0001-0004]), comprising computer program code for obtaining information that is descriptive of a topology of relationships between the self-organizing software agents from at least one of a system registry function and from the self-

Art Unit: 2142

organizing software agents themselves ([0021, 0039-0042, 0051]); and computer program code, responsive to the obtained information and at least one criterion, for making at least one recommendation to at least one of the plurality of self-organizing software agents that is intended to modify the topology ([0033-0038, 0045-0047]).

6. Regarding claims 5 and 24, Kennedy shows where obtaining information is performed on a periodic basis by a topology tuner agent to update the state of the topology ([0141-0144, 0146-0158, 0166-0167]), and where the topology tuner agent makes the at least one recommendation when some topology threshold condition is satisfied (0187, 01910196, 0203, 0211, 0215, 0228]).

7. Regarding claims 7 and 26, Kennedy shows where the at least one criterion comprises a vulnerability of the topology to a failure of one or more of the agents ([0216, 0217, 0225]).

8. Regarding claim 15, Kennedy shows where making at least one recommendation is performed by a topology tuner agent using a multi-cast technique to simultaneously contact a number of the agents ([0034,0038,0217,0221]).

9. Regarding claim 21, Kennedy shows where obtaining information and making at least one recommendation are performed by an entity ([0033-0038,0044-0047]) in an environment ([0024]) that hosts the plurality of agents (Fig. 1).

10. Regarding claim 40, Kennedy further shows where said computer program code is stored on a computer readable medium ([0021]).

11. Regarding claim 42, Kennedy shows a data processing system comprising a plurality of self-organizing software agents capable of autonomously establishing

Art Unit: 2142

relationships between themselves (Abstract, [0001-0004]), where the totality of the relationships can be represented by a topological structure having nodes that each comprise one of the plurality of software agents and links between the nodes that comprise the established relationships ([0141-0144, 0146 – 0158, 0166-0167]), said data processing system further comprising a topology tuning function that obtains information that is descriptive of the topology and, based at least in part on the obtained information and on at least one criterion, that makes a recommendation to at least one of the plurality of software agents that is intended to modify the topology ([0033-00368,0045-0048]).

12. Regarding claim 43, Kennedy shows where topology tuning function is performed by a topology tuner software agent (Abstract, Figs. 1 and 3, [0021, 0033-0038, 0045-0047].

13. Claims 2, 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kennedy in view of Assa (US 2004/0059812 A1).

14. Regarding claim 2, Kennedy shows claim 1.

Kennedy does not show where obtaining information is performed by a topology tuner agent that queries a system registry to determine identities of individual ones of the plurality of agents.

Assa shows where obtaining information is performed by a topology tuner agent that queries a system registry to determine identities of individual ones of the plurality of agents ([0061-0066,0078-0079,0090]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the disclosure of Kennedy with that of Assa in order to utilize an improved topology information system (Assa, Abstract).

15. Regarding claim 3, Kennedy in view of Assa further show where obtaining information is performed by a topology tuner agent that queries individual ones of the plurality of agents to determine to which other agent or agents the individual one of the plurality of agents currently has a relationship (Assa, [0082,0092-0096,0202-0203]).

16. Regarding claim 4, Kennedy in view of Assa further show where obtaining information is performed by a topology tuner agent that queries a system registry to determine to which other agent or agents that individual ones of the plurality of agents currently have a relationship (Assa, Figs. 3 – 5, [0061-0066,0078-0079,0090]).

17. Claims 6, 9, 10, 25, 28, 29 and 45 rejected under 35 U.S.C. 103(a) as being unpatentable over Kennedy in view of Swiler et al. (US 7,013,395 B1), hereafter Swiler.

18. Regarding claims 6 and 25, Kennedy shows claims 1 and 23.

Kennedy does not show where the at least one criterion comprises a vulnerability of the topology to an attack directed to one or more of the agents

Swiler shows where the at least one criterion comprises a vulnerability of the topology to an attack directed to one or more of the agents (col. 3 lines 10 – 15, col.3 lines 25 – 33).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the disclosure of Kennedy with that of Swiler in order to provide for a

Art Unit: 2142

method of assessing security attributes system vulnerabilities (Swiler, Abstract), which are important attributes in keeping a network operationally stable.

19. Regarding claims 9 and 28, Kennedy in view of Swiler further show, where the at least one criterion comprises a vulnerability of the topology to an attack directed to one or more of the agents (Swiler, col. 3 lines 10 – 15, col.3 lines 25 – 33).

Kennedy focuses on discovering new routes and discovering new agents, along with making recommendations to improve the network, but makes no mention of constraining new agents with which relationships can be formed. Swiler, as noted above, does address system vulnerabilities, but not constraining new relationship choices.

Given that there are only two possible methods for agents to behave regarding how to manage new relationships, it would have been obvious to one of ordinary skill in the art at the time of the invention try both choices, thus enabling choosing either limiting relationship choices or not limiting relationship choices.

Therefore, Kennedy in view of Swiller disclose where the at least one recommendation does not constrain the set of potential agents that an agent may select from to form a new relationship or relationships.

To the Office's best knowledge, Kennedy in view of Swiller also disclose performing the above aspects of claims 9 and 28 such that the topology evolves towards a uniform random graph.

Art Unit: 2142

20. Regarding claims 10 and 29, Kennedy in view of Swiler further show, where the at least one criterion comprises a vulnerability of the topology to an attack directed to one or more of the agents (Swiler, col. 3 lines 10 – 15, col.3 lines 25 – 33).

Kennedy focuses on discovering new routes and discovering new agents, along with making recommendations to improve the network, but makes no mention of constraining new agents with which relationships can be formed. Swiler, as noted above, does address system vulnerabilities, but not constraining new relationship choices.

Given that there are only two possible methods for agents to behave regarding how to manage new relationships, it would have been obvious to one of ordinary skill in the art at the time of the invention try both choices, thus enabling choosing either limiting relationship choices or not limiting relationship choices.

Therefore, Kennedy in view of Swiller disclose where the at least one recommendation does constrain the set of potential agents that an agent may select from to form a new relationship or relationships.

To the Office's best knowledge, Kennedy in view of Swiller also disclose performing the above aspects of claims 9 and 28 such that the topology evolves towards a uniform random graph.

21. Regarding claim 45, Kennedy in view of Swiler further further show where the at least one criterion comprises a vulnerability of the topology to an attack directed to one or more of the software agents.

Art Unit: 2142

Kennedy focuses on discovering new routes and discovering new agents, along with making recommendations to improve the network, but makes no mention of constraining new agents with which relationships can be formed. Swiler, as noted above, does address system vulnerabilities, but not constraining new relationship choices.

Given that there are only two possible methods for agents to behave regarding how to manage new relationships, it would have been obvious to one of ordinary skill in the art at the time of the invention try both choices, thus enabling choosing either limiting relationship choices or not limiting relationship choices.

Therefore, Kennedy in view of Swiller disclose where the at least one recommendation does not constrain the set of potential agents that an agent may select from to form a new relationship or relationships, and Kennedy in view of Swiller disclose where the at least one recommendation does constrain the set of potential agents that an agent may select from to form a new relationship or relationships. It is inherent that if the number of relationships with which an agent may form a new relationship is limited that such an agent will have comparatively few relationships.

To the Office's best knowledge, Kennedy in view of Swiller also disclose performing the above aspects of claim 45 such that the topology evolves towards a uniform random graph.

22. Claims 10, 29 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kennedy in view of Swiler, as applied to claims 9 and 28 above, further in view of Brandt et al. (US 2004/0117624 A1), hereafter Brandt.

23. Regarding claims 10 and 29, Kennedy in view of Swiler further show, where the at least one criterion comprises a vulnerability of the topology to an attack directed to one or more of the agents (Swiler, col. 3 lines 10 – 15, col.3 lines 25 – 33).

To the Office's best knowledge, Kennedy in view of Swiller also disclose performing the above aspects of claim 45 such that the topology evolves towards a uniform random graph.

Kennedy in view of Swiler do not explicitly show constraining the set of potential agents that an agent may select from.

Brandt shows removing suspicious computers from the network ([0047]), thus disclosing constraining the set of potential agents that an agent may select from.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the disclosure of Kennedy in view of Swiler with that of Brandt in order to provide additional advanced methods for performing network security checks (Brandt, Abstract).

24. Regarding claim 45, Kennedy in view of Swiler and Brandt further show where the at least one criterion comprises a vulnerability of the topology to an attack directed to one or more of the software agents (Swiler, col. 3 lines 10 – 15, col.3 lines 25 – 33).

Kennedy in view of Swiler and Brandt further disclose removing suspicious computers from the network ([0047]), thus disclosing constraining the set of potential agents that an agent may select from (Brandt, [0047]).

Therefore, Kennedy in view of Swiller and Brandt disclose where the at least one recommendation does constrain the set of potential agents that an agent may select

Art Unit: 2142

from to form a new relationship or relationships. It is inherent that if the number of relationships with which an agent may form a new relationship is limited that such an agent will have comparatively few relationships.

Given that there are only two possible methods for agents to behave regarding how to manage new relationships, it would have been obvious to one of ordinary skill in the art at the time of the invention try both choices, thus enabling choosing either limiting relationship choices or not limiting relationship choices.

To the Office's best knowledge, Kennedy in view of Swiller and Brandt also disclose performing the above aspects of claim 45 such that the topology evolves towards a uniform random graph.

25. Claims 8, 20, 27, 38 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kennedy in view of Stanforth et al. (US 2004/0081166 A1), hereafter Stanforth.

26. Regarding claims 8, 27 and 44, Kennedy discloses claim 1, 23 and 42.

Kennedy does not disclose where the at least one criterion comprises a rate at which agents form new relationships.

Stanforth shows where the at least one criterion comprises a rate at which agents form new relationships (Abstract).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the disclosure of Kennedy with that of Stanforth in order to increase the level of control over the agents in the network, specifically the forming of relationships (Stanforth, Abstract).

Art Unit: 2142

27. Regarding claims 20 and 38, Kennedy in view of Stanforth further show where obtaining information and making at least one recommendation are performed by a topology tuner agent that monitors how frequently individual ones of the agents change their relationships, said topology tuner agent querying (Kennedy [0188-0203]) those agents more frequently that more frequently change their relationships (specifically shown by Stanforth through showing changing the update rate based on relationship changes to save bandwidth and power ([0006-0009, 0015])).

28. Claims 11, 30 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kennedy in view of Brandt and Albert et al. (Error and attack tolerance of complex networks), hereafter Albert.

Kennedy shows claim 1, including where the at least one criterion comprises a vulnerability of the topology to a failure of one or more of the agents ([0216,0217,0225]).

Kennedy does not show where the at least one recommendation constrains the set of potential agents that an agent may select from to form a new relationship or relationship such that the topology evolves towards a scale-free network.

Brandt shows where the at least one recommendation constrains the set of potential agents that an agent may select from to form a new relationship or relationships ([0047]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the disclosure of Kennedy with that of Brandt in order to provide additional advanced methods for performing network security checks (Brandt, Abstract).

Kennedy in view of Brandt do not show where, after set of potential agents that an agent may select from to form a new relationship or relationships is constrained, performing said constraining such that the topology evolves towards a scale-free network.

Albert shows where when connection choices are limited (which Brandt's recommendation constrains the set of potential agents that an agent may select from inherently results in doing), networks evolve to become highly connected and thus scale-free (pg. 379, col. 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the disclosure of Kennedy in view of Brandt with that of Albert in order to provide a better understanding for how limiting network choices will effect a networks characteristics.

29. Claims 12, 13, 14, 31, 32 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Habetha (US 7,031,321 B2).

30. Regarding claims 12 and 31, Kennedy shows claims 1 and 23, including monitoring topology and the need for reconfiguration of topology due to node movement ([0004]) and to adapt to other changes ([0006]), thus showing monitoring the drift or re-self-organization of the topology.

Kennedy does not explicitly show where the at least one recommendation is made to compensate for the drift that has occurred over time.

Habetha shows periodically checking the actual network state to monitor for changes during operation, and updating the topology based on these changes (col. 1

Art Unit: 2142

line 15 – col. 2 line 35), thus showing monitoring over time and making at least one recommendation to compensate for changes over time.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the disclosure of Kennedy with that of Habetha in order to provide for an improved method of monitoring a dynamic network and ensuring that network state records reflect actual network conditions (Habetha, Abstract).

Kennedy in view of Habetha thus show obtaining information comprises monitoring the drift or re-self-organization of the topology over time, and where the at least one recommendation is made to compensate for the drift.

31. Regarding claims 13 and 32, Kennedy in view of Habetha further show where obtaining information and making at least one recommendation are performed by a topology tuner agent that is recognized by the plurality of agents to have privileges giving it sufficient nominal authority to make its recommendations to the other agents effective, specifically where Kennedy shows a distributed system that tunes topology ([0004-0006,0039-0042,0051]), and Habetha shows using centralized controllers making network management decisions networks (Fig. 2, col. 1 lines 15 – 43, col. 2 lines 63 – 67, col. 3 lines 48 – 64). It is inherent that a central controller, as shown by Habetha, have privileges giving it sufficient nominal authority to make its recommendations to the other agents effective, as otherwise it would be inoperable due to its inability to control anything.

Kennedy in view of Habetha thus show where obtaining information and making at least one recommendation are performed by a topology tuner agent that is

recognized by the plurality of agents to have privileges giving it sufficient nominal authority to make its recommendations to the other agents effective.

32. Regarding claims 14 and 33, Kennedy in view of Habetha further show where said topology tuner agent behaves otherwise as a peer agent that uses the same system messaging infrastructure as the other agents (Kennedy, Figs. 1 and 2, [0026-0031,0033-0034,0166,0170,0172], specifically showing route maintenance/updating (topology tuning) taking place in normal peer agents, thus showing each peer agent also representing said topology tuner).

33. Claims 16 and 34 rejected under 35 U.S.C. 103(a) as being unpatentable over Kennedy in view of Liu et al. (US 7,184,421 B1), hereafter Liu.

Kennedy shows claims 1 and 23, including where making at least one recommendation is performed by a topology tuner agent (Kennedy, Figs. 1 and 2, [0026-0031,0033-0034,0166,0170,0172]).

Kennedy does not show using a single-cast technique to individually contact the agents.

Liu shows using a single-cast technique to individually contact the agents (Abstract, col. 1 lines 30 – 35).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the disclosure of Kennedy with that of Liu in order to utilize an old and well known method of efficiently routing information directly between two computers.

34. Claims 17 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kennedy in view of Goldman et al. (US 2003/0046583), hereafter Goldman.

Kennedy shows claims 1 and 23, including where obtaining gathers information concerning all relationships ([0141-0164]), and making at least one recommendation ([0033-0038, 0045-0047]).

Kennedy does not show where said at least one recommendation applies to all types of relationships between agents.

Goldman shows where at least one recommendation applies to all types of relationships between agents ([0032], specifically showing applying recommendations to allow or prohibit services to users both inside and outside of the network, which comprises all types of relationships).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the disclosure of Kennedy with that of Goldman in order to apply security goals across all areas of a network, improving the goal of maintaining network security (Goldman, Abstract).

35. Claims 18, 19, 36 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kennedy in view of Cain (US 6,697,325 B1).

36. Regarding claims 18 and 36, Kennedy shows claims 1 and 23.

Kennedy does not show where obtaining information gathers information concerning relationships of a certain type or types, and where the at least one recommendation applies only to the certain type or types of relationships between agents.

Cain shows where obtaining information gathers information concerning relationships of a certain type or types (Fig. 2; where the type is relationships between active and failed links), and where the at least one recommendation applies only to the certain type or types of relationships between agents (Fig. 2; recommending only nodes/agents involved with the failed link update their topology database).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the disclosure of Kennedy with that of Cain in order to minimize the overhead inherently involved in monitoring network traffic by minimizing the sources from which information is gathered and the sources to which recommendations are made.

37. Regarding claims 18 and 37, Kennedy in view of Cain further show where obtaining information and making at least one recommendation are performed in response to a notification of a change in the topology (Cain, Fig. 2, specifically showing where said recommendation is only performed after being informed of a link failure (which comprises said topology change)).

38. Claims 22 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kennedy in view of Hanzlik et al. (US 2004/0044891 A1), hereafter Hanzlik.

Kennedy shows claims 1 and 23, including making at least one recommendation ([0033-0047]).

Kennedy does not show where the plurality of agents operate with a common set of system policies that are capable of being changed by a policy update procedure, and

where making at least one recommendation is performed during a policy update procedure.

Hanzlik shows where the plurality of agents operate with a common set of system policies (Figs. 1A and 8A, [0030]) that are capable of being changed by a policy update procedure ([0048-0050]), and performing multiple tasks during a policy update procedure ([0048-0051]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the disclosure of Kennedy with that of Hanzlik in order to provide for a method maintaining a common set of network behavior, to, among other goals, help maintain system security and coherency (Hanzlik, Abstract).

Kennedy in view of Hanzlik thus show giving network recommendations (Kennedy [0033-0047]) and policy updates, where said policy updates can comprise multiple items sent during one update (Hanzlik [0048-0051]). It would have thus been obvious to one of ordinary skill in the art at the time of the invention that one of the multiple items sent during a policy update could be a recommendation, as minimizing the number of transmissions would have the obvious effect of improving network performance, as well as being an old and well known method in the art of optimizing network traffic.

39. Claim 41 rejected under 35 U.S.C. 103(a) as being unpatentable over Kennedy in view Ikeda et al. (5,091,920), hereafter Ikeda.

Kennedy shows claims 23 and 24, including a threshold condition ([0211, 0215])

Kennedy does not show where said threshold condition is expressed as a variable threshold value.

Ikeda shows expressing a threshold condition is expressed as a variable threshold value (Abstract).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the disclosure of Kennedy with that of Ikeda in order to utilize an method of making accurate comparisons (Ikeda, Abstract).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John M. Frink whose telephone number is (571) 272-9686. The examiner can normally be reached on M-F 7:30AM - 5:00PM EST; off alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on (571)272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2142

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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